

Carbon Capture and Storage (CCS): Bridging the Commercial Gap

A workshop organized by the International Energy Agency Working Party on Fossil Fuels (IEA WPPF) in collaboration with the Coal Industry Advisory Board (CIAB), the Carbon Sequestration Leadership Forum (CSLF) and the Global Carbon Capture and Storage Institute (GCCSI)

Activity Component of the IEA WPPF Strategic Plan in Support of the G8 CCS Recommendations



29 – 30 September 2009

New York Marriott East Side • 525 Lexington Avenue at 49th Street, New York, NY 10017



INTERNATIONAL ENERGY AGENCY
Working Party for Fossil Fuels, WPPF



CIAB

Carbon Sequestration Leadership Forum
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Background:

In 2008, the IEA and CSLF delivered 25 recommendations to the Group of Eight (G8) to accelerate commercial deployment of CCS technology. The core recommendation, strongly supported by G8 leaders, was that “20 large-scale projects need to be launched globally by 2010, with a view to supporting technology development and cost reduction for the beginning of broad deployment of CCS by 2020.”

One of the key high-level recommendations supporting this core objective centered on the commercial gap and the exceptional risks for commercial investors in first-of-a-kind projects:

“Governments should address, together with the private sector, the financial gap and elevated risks facing early CCS projects in order to accelerate the commercial deployment of CCS, recognizing that market mechanisms alone will not be sufficient for the early deployment of CCS.”

The present workshop has been convened in response to this supporting recommendation – to address the commercial gap and first-of-a-kind commercial investment risks, and to develop recommendations for actions by governments.

Objective:

The workshop will develop recommendations to:

- 1. Bridge the Commercial Gap** - What mechanisms available to governments are best suited to provide the public funding necessary to bridge the commercial gap to launch the initial 20 large-scale CCS demonstration projects recommended by the G8?
- 2. Narrow the Commercial Gap** - What investment risk management measures can governments take to narrow the commercial gap and thereby reduce the requirement for public funding?

Anticipated Outcomes:

A succinct report will be produced that captures the key issues, analyses and conclusions derived from the workshop. The report will include a set of high-level recommendations on policy options that will contribute to the G8 CCS implementation process. The workshop recommendations will also be delivered in October to Ministers at the Third CSLF Ministerial Meeting in London.

Workshop Participants:

The workshop of up to 100 international participants is by-invitation-only. It will engage representatives from CCS project developers, equipment manufacturers and service providers, the financial community, government, and stakeholders from the IEA, CSLF, and GCCSI.

Monday, 28 September

3:00 p.m. Workshop Registration Opens

5:00 p.m. Workshop Registration Closes

Tuesday, 29 September

8:00 a.m. Registration and Continental Breakfast

9:00 a.m. Background to the IEA G8 CCS Implementation Process

- Jostein Dahl-Karlsen, Chair, IEA WPPF and Senior Advisor, Ministry of Petroleum and Energy, Norway (Confirmed)

9:15 a.m. Welcome

- James Markowsky, Assistant Secretary, Office of Fossil Energy, U.S. Department of Energy (Confirmed)

9:30 a.m. Workshop Introduction

- Bill Koppe, Senior Executive, Global CCS Institute, *Workshop Issues Report* and the GCCSI Perspective (Confirmed)

9:45 a.m. Session I: Identification and Assessment of CCS Project Costs, Risks and Financing Issues

Chair: Keith Burnard, Senior Energy Technology Specialist, IEA (Confirmed)

- Christopher Short, Chief Economist, Global CCS Institute *Strategic Analysis of the Global Status of CCS*, Key Results of the GCCSI-commissioned Study (Confirmed)
- Robert Sansone, President, The Power Gen and Construction Practice, LLC – Liability and Risk: Understanding Insurance Liability and Potential CCS Hazards (Confirmed)
- Tom Wilson, Manager, Climate Programs, Electric Power Research Institute (EPRI) – CCS Financing: Gaps Analysis, Key Results of the EPRI Study (Confirmed)

11:15 a.m. Questions and Answers (Q&A) and Comments

11:30 a.m. Break

11:45 a.m. Session II: CCS Project Case Studies

Chair: Roger Wicks, Head of Energy, Anglo American, and Chairman, CIAB/IEA (Confirmed)

- John Torkington, Senior Advisor for Climate Change Policy, Chevron Australia and Arthur Lee, Fellow and Principal Advisor, Chevron Corporation – Issues Associated with Commercial Projects (Confirmed)
- Peter Cunningham, Managing Director, Energy & Climate Strategy, Rio Tinto – The Hydrogen Energy International USA Kern County, California Project (Confirmed)
- TBD - Canadian CCS Project

1:15 p.m. Q&A and Comments

1:30 p.m. Lunch

2:30 p.m. Session III: Public Funding Mechanisms and Risk Mitigation Proposals for the first 20 CCS Projects

Chair: TBD, World Bank

- Chiara Trabucchi, Principal, Industrial Economics, Inc. – Proposal for U.S. Government Support (Confirmed)
- Martin Deutz, Head of Cleaner Fossil Fuels Unit, Department of Energy and Climate Change – UK Proposals (Confirmed)
- Dick Wells, Chairman, The National Low Emissions Coal Council, Australia (Confirmed)

3:30 p.m. Break

3:45 p.m. Session III: Cont.

- TBD, Ministry of Petroleum and Energy, Norway
- Darien Sturges, Clinton Climate Initiative, William J. Clinton Foundation (Confirmed)

4:30 p.m. Q&A and Comments

5:00 p.m. Adjourn

6:00 p.m. Dinner

Wednesday, 30 September

9:00 a.m.	Session IV: Views on Government Measures to Reduce Commercial Risk for CCS Deployment Chair: Arthur Lee, Fellow and Principal Advisor, Chevron Corporation (Confirmed) <ul style="list-style-type: none">• Lindene Patton, Climate Product Officer, Zurich Financial Services Group (Confirmed)• Andrew Paterson and Maria Pineda, CCS Alliance, Hunton & Williams, LLP (Confirmed)• Kipp Coddington, Partner, Energy Infrastructure, Climate Change and Technology Group, Alston & Bird (Confirmed)
10:30 a.m.	Break
10:45 a.m.	Session IV Cont. <ul style="list-style-type: none">• Bruce Kahn, Director and Senior Investment Analyst, DB Climate Change Advisors, Deutsche Asset Management (Confirmed)
11:15 a.m.	Q&A and Comments
11:45 a.m.	Closing Remarks <ul style="list-style-type: none">• Jeffrey D. Sachs, Director, The Earth Institute, Columbia University (Confirmed)
12:30 p.m.	Guidance to Breakout Groups
12:45 p.m.	Lunch
1:30 p.m.	Breakout Sessions: Facilitators: Bill Koppe, GCCSI, Keith Burnard, IEA, Luke Warren, World Coal Institute, John Groom, Anglo American and Pamela Tomski, EnTech Strategies Workshop participants are to specifically address the risk and financing issues associated with a variety of CCS project types -- with a specific focus on the 20 demonstrations backed by the G8 -- and provide recommendations on (i) various risks affecting financing for early CCS projects (ii) strategies to manage risks for different types of CCS projects and (iii) strategies to bridge the commercial gap in funding through public financing mechanisms or a combination of public-private mechanisms. Key questions to address include: <ol style="list-style-type: none">1. What mechanisms available to governments are best suited to provide public funding necessary to bridge the commercial gap to launch the initial 20 large-scale CCS demonstrations worldwide by 2010, recommended by the G8.2. What investment risk management measures can governments take to narrow the commercial gap and reduce the requirement for public funding?
3:30 p.m.	Session V: Recommendations Chair: Ian Hayhow, Natural Resources Canada Breakout Session Recommendation Reports
4:30 p.m.	Closing Remarks Barbara McKee, Vice Chair, IEA WPF and Director, Office of Clean Energy Collaboration, U.S. Department of Energy (Confirmed)

Location: New York Marriott East Side
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Group Room Rate: \$239 (Register "CCSWorkshop")
Cut Off Date: September 14, 2009